

Title (en)
METHOD FOR ANALYZING PROTEIN-PROTEIN INTERACTION ON SINGLE-MOLECULE LEVEL WITHIN THE CELLULAR ENVIRONMENT

Title (de)
VERFAHREN ZUR ANALYSE VON PROTEIN-PROTEIN-INTERAKTIONEN AUF EINZELMOLEKÜLEBENE IN EINER ZELLULÄREN UMGEBUNG

Title (fr)
PROCÉDÉ POUR L'ANALYSE D'INTERACTION PROTÉINE-PROTÉINE AU NIVEAU D'UNE MOLÉCULE UNIQUE DANS UN ENVIRONNEMENT CELLULAIRE

Publication
EP 2700950 A2 20140226 (EN)

Application
EP 12774636 A 20120420

Priority

- KR 20110036942 A 20110420
- KR 20110120653 A 20111118
- KR 2012003087 W 20120420

Abstract (en)
A method of analyzing protein-protein interactions at a single molecular level is disclosed. The method of analyzing the interactions between first proteins and second proteins at the single molecular level includes: preparing at least two substrates, in which first protein-binding molecules that are biomolecules to be bound to the first proteins are attached to each of the substrates; inducing binding between the first proteins and the first protein-binding molecules on the first substrate and the second substrate, respectively, by supplying the first proteins included in the control group-cell to the first substrate among the two substrates and supplying the first proteins included in the experimental group-cell to the second substrate among the two substrates; supplying cell lysates of cells including the marker-tagged second proteins to the first substrate and the second substrate, respectively, when the first proteins and the first protein-binding molecules are bound to the first substrate and the second substrate, respectively; and comparing and analyzing the interactions between the first proteins and the second proteins on the first substrate and the second substrate in the supply of the cell lysates to the first substrate and the second substrate, respectively. For observing the interactions between the first proteins and the second proteins, the state of each cell and activation levels of the first proteins can be compared and analyzed by comparing after varying of a type of cells supplying the first proteins.

IPC 8 full level
G01N 33/68 (2006.01); **G01N 21/64** (2006.01); **G01N 33/574** (2006.01); **G01Q 30/14** (2010.01); **G01Q 60/20** (2010.01)

CPC (source: CN EP KR US)
G01N 21/64 (2013.01 - KR); **G01N 21/6428** (2013.01 - CN EP US); **G01N 21/6486** (2013.01 - US); **G01N 21/77** (2013.01 - US); **G01N 33/533** (2013.01 - KR); **G01N 33/574** (2013.01 - CN EP KR US); **G01N 33/68** (2013.01 - KR); **G01N 33/6845** (2013.01 - CN EP US); **G01N 21/6458** (2013.01 - CN EP US); **G01N 21/648** (2013.01 - CN EP US); **G01N 2021/7786** (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2700947 A2 20140226; **EP 2700947 A4 20150107**; **EP 2700947 B1 20200603**; CN 103582817 A 20140212; CN 103582817 B 20160210; CN 103608677 A 20140226; CN 103608677 B 20160907; CN 105928915 A 20160907; CN 105928915 B 20190528; EP 2700950 A2 20140226; EP 2700950 A4 20150107; EP 2700950 B1 20200722; JP 2014512537 A 20140522; JP 2014514569 A 20140619; JP 2016105094 A 20160609; JP 2018059942 A 20180412; JP 5767746 B2 20150819; JP 5903486 B2 20160413; JP 6258915 B2 20180110; JP 6543681 B2 20190710; KR 101158362 B1 20120622; KR 101162919 B1 20120705; KR 101167649 B1 20120720; KR 101249456 B1 20130403; KR 101339819 B1 20131210; KR 20120119989 A 20121101; KR 20120120092 A 20121101; US 10401367 B2 20190903; US 2014113307 A1 20140424; US 2014113309 A1 20140424; US 2016266139 A1 20160915; US 2016327566 A1 20161110; US 2017299603 A1 20171019; US 2018284127 A1 20181004; US 9377462 B2 20160628; US 9423400 B2 20160823; US 9733255 B2 20170815; US 9739785 B2 20170822; US 9964544 B2 20180508; WO 2012144859 A2 20121026; WO 2012144859 A3 20130321; WO 2012144859 A9 20130131; WO 2012144861 A2 20121026; WO 2012144861 A3 20130307

DOCDB simple family (application)
EP 12774021 A 20120420; CN 201280026166 A 20120420; CN 201280026174 A 20120420; CN 201610239561 A 20120420; EP 12774636 A 20120420; JP 2014506337 A 20120420; JP 2014506338 A 20120420; JP 2015248664 A 20151221; JP 2017234865 A 20171207; KR 20110088062 A 20110831; KR 20110088084 A 20110831; KR 20110120653 A 20111118; KR 20120012326 A 20120207; KR 2012003077 W 20120420; KR 2012003087 W 20120420; KR 20120045529 A 20120430; US 201314059294 A 20131021; US 201314059349 A 20131021; US 201615162673 A 20160524; US 201615211096 A 20160715; US 201715642427 A 20170706; US 201815945890 A 20180405